

International Foundation of Hope
Nangarhâr Agricultural Development Project

Final Report
to the
United States Agency for International Development

Nangarhâr Canal Project
Award No. EEE-A-00-02-00040-00

28 May 2005

International Foundation of Hope
Final Report
Nangarhâr Canal Project
Award No. EEE-A-00-02-00040-00

Overview: The overall goal of the International Foundation of Hope's Nangarhâr Agricultural Development Project (the "Canal Project") was to rehabilitate the agricultural economy of Afghanistan's Nangarhâr Province by providing means and incentives to foster locally owned agribusinesses while reducing the economic reliance on poppy production. At the outset of the project four programs were established to provide an integrated package of incentives and training to farmers in Nangarhâr:

- Canal Rehabilitation Program,
- Agricultural Program,
- Horticultural Program,
- Community Empowerment Program.

Each program comprised several projects, the beneficiaries of which were thousands of regional farmers and daily wage earners.

The Canal Project's duration was from November 2002 through February 2005. The original one-year award term was extended through USAID-approved no-cost extensions. The total budget for the project was \$2,000,000, distributed as follows:

Category	Amount
Administration	\$395,304
Canal Rehabilitation Program	\$484,010
Agricultural Program	\$370,128
Horticultural Program	\$418,411
Community Empowerment Program	\$332,147
Total:	\$2,000,000

The following paragraphs summarize the accomplishments of the four component programs.

Canal Rehabilitation Program: The goal of the Canal Rehabilitation Program was to rehabilitate the major irrigation system in Nangarhâr Province, which is administered by the Nangarhâr Valley Development Authority (NVDA), a department (*riâsat*) of the Ministry of Agriculture. The NVDA's canal system provides irrigation for 19% of Nangarhâr's agricultural land. Annual dredging and repair operations ceased during the 24 years of hostilities in Afghanistan, resulting in excessive silting with a 50% reduction of water flow. From November 2002 through August 2004, IFHope

- dredged the entire usable length (58 Km) of the 70 Km-long main canal;
- cleaned 18 of the system's secondary irrigation ditches, a total of 90 Km;
- reconstructed or replaced all damaged and destroyed structures along the rehabilitated portions of the system, including one main intake gate, 47 major gates, 8 large gates, 31 medium gates, 416 small gates, and 8 siphons, along with associated hardware and masonry.

Results of this work

- restored the system to its full-flow capacity of 50 m³/sec, a 100% increase over the pre-project potential flow;
- impacted some 30,000 families that receive irrigation water from the canal system;
- left a legacy of rejuvenated equipment and facilities for the NVDA's continuing stewardship of the canal system;
- elicited an agreement from the NVDA stating that anyone growing poppies on NVDA-irrigated land would lose their water rights; but enforcement of this agreement has proved difficult.

Overall cost for the canal rehabilitation program was \$484,010, 24.2 % of the budget.

Agricultural Program: The goal of IFHope's Agricultural Program was to provide farmers with the means and incentives for growing income-producing crops as an alternative to growing poppy. To achieve this goal, IFHope

- multiplied regionally adapted, improved variety grain, pulse, and oil seed and vegetable seed and seedlings for distribution to farmers as part of an integrated package of incentives;

- prepared demonstration plots for drip-irrigation in an attempt to encourage water conservation in chronically dry areas;
- conducted agricultural training seminars and on-site demonstrations for farmers who received agricultural and horticultural inputs under IFHope's programs;
- developed a two-year survey of retail produce prices in 25 major cities across Afghanistan and neighboring Pakistan, to provide a market database for use by farmers and agricultural planners.

IFHope's accomplishments under this program include:

- distribution of grain and pulse seed to 2,695 farmers covering 559 Ha; seeds produced included wheat, maize, rice, barley, mung bean, green pea, sunflower, and canola;
- distribution of vegetable seed to 1,479 farmers covering 258 Ha; seeds produced include onion, garlic, tomato, eggplant, chili pepper, bell pepper, cucumber, okra, spinach, cauliflower, cabbage, broccoli, red radish, white radish, carrot, turnip, squash, pumpkin, gourd, watermelon, *kharbuzâ* melon;
- distribution of seedlings to 823 farmers covering 152 Ha; seedlings produced include onion, tomato, and eggplant;
- installation of two drip-irrigation demonstration plots: a 206-tree, 0.8 Ha orchard at IFHope's nursery facility in Nangarhâr and a 140-tree, 0.4 Ha orchard at the district council center in Nangarhâr's Surkh Rud District;
- training of over 1,300 farmers through 8 1-day seminars, 6 5-day seminars, and some 300 on-site training sessions;
- collection of 22 months of retail price statistics for a range of 20 to 50 agricultural commodities in 25 cities across Afghanistan and Pakistan; these data formed the statistical basis for the most widely-cited horticultural study in Afghanistan, published by Altai Consulting for the UNDP.

Overall cost for the agricultural program was \$370,128, 18.5 % of the budget.

Horticultural Program: The goal of IFHope's Horticultural Program was to provide farmers with the means and incentives for growing high-income-producing tree crops as an alternative to growing poppy. To achieve this goal, IFHope

- established a fruit- and nut-tree nursery to produce regionally adapted, improved varieties of rootstock which were budded with various varieties for distribution to farmers as part of an integrated package of incentives;
- established a shade- and forest-tree nursery to provide non-fruit-tree saplings for planting in the arid and upland regions of the province, to alleviate drought conditions through increased water entrapment and microclimate modification;
- rehabilitated a research and demonstration orchard to showcase the varieties of commercial fruit trees that can thrive in the region;
- assessed the productive potential of the NVDA's defunct olive industry.

IFHope's accomplishments under this program include:

- establishment of the largest tree nursery in Afghanistan, with 2,000,000 saplings currently in the ground to provide for the revitalization of the region's arboricultural economy;
- distribution of 107,300 fruit- and nut-tree saplings to over 370 farmers to produce some 330 ha of orchards; 800,000 saplings planted under this program remain in the ground which must be grown for another year before future distribution; saplings produced include sour orange, blood orange, lemon, kino, grapefruit, apricot, peach, plum, apple, pear, cherry, pomegranate, fig, grape, mulberry, persimmon, guava, mango, loquat, almond, and walnut;
- provision of 355,200 shade and forest trees to public places (schools, public buildings, parks, roadside plantings) in Nangarhâr, Kâbul and other areas, to provide shade and reforested greenbelts; 1,200,000 saplings planted under this program remain in the ground for future maturation and eventual distribution; saplings produced include eucalyptus (*camaldulensis*), black pine, edible-nut pine (*gerardiana*), Aleppo pine, deodar cedar, juniper, dwarf juniper, oriental arborvitae, Italian cypress, fir, poplar, tamarisk, hollyoak (*balut*), acacia (*khinjak*), acacia (*nilotica*), leucaena, dedonia, bottlebrush, shisham, cotton-tree, tree-of-heaven (*Ailanthus glandulosa*), *Albizia lebbek*, western redbud, wild pistacio (*khinjak*), plane tree, zizyphus, *cassia fistula*, rose, bougainvillea and queen-of-the-night;

- provision of 1,900 new saplings to the NVDA's Sample Garden demonstration orchard, including 80 cherry, nectarine, and apricot saplings imported from America, plus the complete rehabilitation of the facility's irrigation system and 14 Ha of orchards and grounds;
- presentation of a 1-day, on-site seminar to demonstrate proper pruning techniques for olive trees;
- production of an assessment of the NVDA's olive-oil factory; which showed the current non-viability of refurbishing the factory unless it is privatized.

Overall cost for the horticultural program was \$418,411, 20.9 % of the budget.

Community Empowerment Program: Essential to reducing poppy production is the integration of local farmers into the national and global civic and economic communities. To promote such integration, IFHope and its implementing partner, the Abdul Haq Foundation, have

- established a system of representative advisory councils that interface between local communities, the provincial government, and the NGO community; these councils provide input to governing agencies from local communities regarding their needs in development-policy planning, giving the grass-roots community a voice in its governance; the councils also provide a platform for civic education, community self-reliance, and democratic institution-building;
- promoted a reduction in poppy growing through the influence of the community councils, which oversaw the selection of reliable and needy farmers to be the recipients of IFHope's agricultural and horticultural incentive programs described above, and which supported at the district level the national government's campaign to eradicate poppy growing.

IFHope's accomplishments under this program include:

- establishment of community-based advisory councils for each of the 22 administrative districts of Nangarhâr and for the 5 precincts of the provincial capital, Jalâlâbâd, as well as for 9 special-interest minority groups including women, nomads, religious minorities, youth, academics, and writers;
- construction of 11 district-council centers to house the meetings of the district councils and to provide a venue for community activities; most of these facilities have adjoining land for agricultural demonstration plots to showcase modern horticultural techniques; centers were constructed in the following districts:

District	Completion Date
Sur Rud	June 2003
Ghani Khêl	June 2003
Momandara	December 2003
Khugyânî	December 2003
Kâma	July 2004
Khewâ	July 2004
Achin	July 2004
Nâzyân	July 2004
Hisârak	September 2004
BaTi KoT	September 2004
Deh Bâlâ	September 2004

- establishment of a province-wide Council of Nangarhâr Communities to bring together delegates from all 36 community councils to oversee and coordinate the activities of the individual councils;
- renovation and furnishing of the formerly used governor's office in Jalâlâbâd as a venue for the meetings and activities of the Council of Nangarhâr Communities;
- support of the operations of the Council of Nangarhâr Communities and 5 key district councils from January 2003 to August 2004, which facilitated
 - full operations of the councils, including local dispute settlement, women's rights education, community planning, and procedures for community participation in voting for ratification of the national constitution, the election of *loya jirga* delegates, and the presidential election;
 - community support for the national government's successful campaign to reduce poppy growing by over 90% in Nangarhâr Province in 2004; the government's position was strongly enhanced by the endorsement and political weight of the

representatives of the Council of Nangarhâr Communities, many of whom laid the groundwork toward banning poppy cultivation by signing commitments in 2003 to interdict poppy growing in seven provincial districts of Nangarhâr;

- provision of an integrated package of agricultural and horticultural incentives designed to bring the farmers of Nangarhâr into the global marketplace, as detailed in the sections above.

Overall cost for the community empowerment program was \$332,147, 16.6 % of the budget.

Operations: During this project IFHope leased 124 Ha of NVDA-owned agricultural land, which was used for IFHope's agricultural and horticultural programs. IFHope's headquarters in Nangarhâr reside in a 20-room office building located at Block 7 of the NVDA's Hadda Farm, some 10 Km east of the provincial capital, Jalâlâbâd. At nearby Samar Khêl there is a complex of buildings that are used for seed storage. IFHope also leases a house in Kâbul as a support facility. IFHope's Home Office is in Colorado Springs, CO, USA.

Throughout the duration of this project IFHope maintained a average total payroll of some 200 workers. The Nangarhâr office staff included an executive director, two program directors, eleven agricultural and horticultural specialists, a financial officer, a logistics assistant, an engineering supervisor, five household staff, and six drivers. There was one market researcher based in Kâbul. Approximately 175 agricultural day laborers, some seasonal and some doubling as security guards, were employed at IFHope's agricultural facilities. In addition, 37 skilled NVDA workers were employed in cleaning the main canal, while another 140 day laborers were hired as needed for hand-cleaning operations on the main and secondary canals. Under this project, IFHope provided \$569,723 in wages to Afghanistan's citizens. \$395,304, 19.8% of the budget, was spent on administration costs in Afghanistan.

IFHope's Nangarhâr Agricultural Development Project worked in close cooperation with the Abdul Haq Foundation, IFHope's implementing partner for community development, and with the Nangarhâr Valley Development Authority, IFHope's partner in irrigation canal maintenance. IFHope maintained close ties with the Ministry of Agriculture's extension workers, through its Community Development Program and maintained ties with the Nangarhâr Agricultural University through faculty members who served part-time on IFHope's staff as agricultural specialists.